REMARKS

This is in response to the Final Office Action mailed on June 14, 2006 in which all of pending claims 1, 3-18, 20-34 and 36-39 were rejected. With this Response After Final, no further amendments are made to the pending claims. Reconsideration and allowance of pending claims 1, 3-18, 20-34 and 36-39 are respectfully requested in view of the following comments.

Examiner's Response to Previous Arguments Presented

In section 5 of the Final Office Action, the Examiner provided responses to previously submitted arguments. First, the Examiner stated that:

> Applicant argues:
> a. Boozer does not teach REA models, particularly 'creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object' (page 9, second paragraph).

In response, the Examiner stated that:

> Regarding argument (a), examiner disagrees with applicant. Boozer shows associations between objects to determine security between objects. In figure 2, the first object and the second object are in a relationship with each other, as imposed by the containment boundary. The containment boundary establishes security rules for the two objects, which would be an association class object. As for Boozer not showing REA model, *ipsissimis verbis* states that the elements must be arrange (sic) as required by the claims, but the terminology or wording is not required. See In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The Examiner's analysis is again respectfully traversed. First, the fact that the first object and the second object of figure 2 of Boozer are in a relationship with each other does not support the Examiner's statement "as imposed by the containment boundary." The fact that Boozer teaches associations between objects is not disputed. However, Boozer does not state that the association between the first and second objects is imposed by the containment boundary. Instead, Boozer teach that in forming the containment boundary, the security rules specify which object associations are involved. For example, on page 1, paragraph [0018], Boozer states:

> Object security rules 66 help form the containment boundary 68 by specifying what object associations 72 are involved in constructing the containment boundary 68. Because, an object 70 may have multiple associated objects (74, 76, 78), object access security rules 66 specify which object associations 72 are to be used in constructing the containment boundary 68.

Second, the Examiner's statement that "[t]he containment boundary establishes security rules for the two objects, which would be an association class object" (emphasis added) is without support in Boozer. Specifically, the second part of that statement does not follow from the first. As noted, Boozer has stated that the security rules help form the containment boundary. More important, however, is the fact that there is nothing about a containment boundary establishing security rules (or vice versa in the above Boozer quote where the security rules construct the containment boundary) for two objects which would necessitate or support the conclusion "which would be an association class object." Boozer does not teach or suggest creating an association class object for an association between the first object and the second object, with the association class object having properties defining security between the first object and the second object, neither for an REA defined association or for a non-REA defined association.

Third, the Examiner's reliance on the statement, that "[a]s for Boozer not showing REA model, *ipsissimis verbis* states that the elements must be arrange (sic) as required by the claims, but the terminology or wording is not required", is traversed. This principle is not applicable in the present instance. In the case at hand, even ignoring for the moment the REA model limitation of the claim, it has been demonstrated that the elements taught by Boozer are not arranged as required by the claims. Boozer does not teach the creation of an association class object for an association between first and second objects, with the association class object having properties defining security between the first object and the second object. Further, this statement by the Examiner falsely presumes that claim limitations such as "REA model" and "REA defined association" are merely terminology. In fact, as has been pointed out, this is not the case and these express claim limitations cannot be simply ignored.

> Also in section 5 of the Final Office Action, the Examiner stated that:
>
> Applicant argues:
> a. . . .
> b. Tingey does not teach REA security, namely 'creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object' (page 9, last paragraph through page 10, first paragraph).

In response, the Examiner stated that:

> Regarding argument (b), examiner disagrees with applicant. Boozer was stated for teaching all of the limitations of claim 1, except that there was no stated REA model and the association class object has properties for defining security. Tingey discloses security of data (or objects) with properties.

The Examiner's analysis is again respectfully traversed. First, in the Office Action, Tingey was cited for teaching more than security of data or objects with properties. The rejection in section 4 (page 3) of this Final Office Action states:

> Tingey teaches REA models (fig. 1), and wherein creating the association class object for the association between the first object and the second object further comprises creating an association class object having properties defining security between the first object and the second object (paragraph 0066).

As has been shown in the previously filed Response, like Boozer, Tingey does not teach the step of "creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object." Neither reference teaches this claim limitation. Nor does either reference teach the similar limitation in other claims of "a security model configured to implement an association class object for the REA defined association between the first object and the second object in the REA model, such that properties of the association class object define security between the first object and the second object." As has been demonstrated, like Boozer, the Tingey publication does not show, discuss, or make any reference to association class objects for REA defined associations between a first object and a second object. Without one of these two cited

references teaching the association class object recited in the rejected claims, it is not possible for either reference to teach that the association class object has properties defining security between the first and second objects, as is also specifically required in each of the rejected claims. Lacking a teaching of these claim limitations in either reference, a *prima facie* case of obviousness has not been made, and the claims are believed to be in allowable condition. Reconsideration and allowance are respectfully requested.

The remainder of the Remarks again address the specific claim rejections made in the Final Office Action.

Claims

Independent claim 1 recites a method of providing Resource-Event-Agent (REA) model based security. The method includes the steps of "identifying an REA defined association of a type which dictates ownership between a first object and a second object in an REA model", and "creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object." Independent claim 18 recites a computer readable medium with the same limitations. Independent claim 34 recites a system for providing security which includes similar limitations. The system includes "a Resource-Event-Agent (REA) model configured to implement a first object, a second object, and an REA defined association of a type which dictates ownership between the first object and the second object." The system of claim 34 also includes "a security model configured to implement an association class object for the REA defined association between the first object and the second object in the REA model, such that properties of the association class object define security between the first object and the second object."

Claim Rejections and Arguments

In section 4 of the Final Office Action, claims 1, 3-18, 20-34 and 36-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Boozer et al. (U.S. Patent Pub. No. 2004/0205355

A1) in view of Tingey (U.S. Patent Pub. No. 2004/0133583). In support of the rejection under 35 U.S.C. § 103(a), the Office Action stated that Boozer et al. (hereafter Boozer) teach "a method/system/computer readable medium for providing Resource-Event-Agent (REA) model based security." More specifically, the Office Action stated that Boozer teach the steps of "[i]dentifying an REA defined association of a type which dictates ownership between a first object and a second object," and "[c]reating an association class for the REA defined association between the first object and the second object, the association class defining security between the first object and the second object." The assertion that Boozer teaches these steps is respectfully traversed.

In support of this traversal, it is noted that, also in section 4 of the Office Action, the Examiner again also acknowledges that Boozer does not teach each of these steps. Specifically, the Office Action states that Boozer "does not specifically teach REA models and wherein creating the association class object for the association between the first object and the second object further comprises creating an association class object having properties defining security between the first object and the second object." In fact, however, since Boozer does not teach REA models, REA defined associations of types which dictate ownership, and/or association class objects for the REA defined associations between objects, this reference actually fails to teach or suggest either of the steps of method claim 1. The same is true for the corresponding limitations in computer-readable medium independent claim 18 and system claim 34.

The shortcomings of Boozer in satisfying a *prima facie* conclusion of obviousness against the pending claims are also not overcome by Tingey. The Office Action asserts that Tingey teaches REA models and the limitation of creating association class objects for an association between the first object and the second object, with the association class object having properties defining security between the first object and the second object. Specifically, the Office Action references paragraph 0066 of Tingey as providing such a teaching. These assertions regarding the disclosure of Tingey are respectfully traversed as well.

Tingey teach a record-extensible event accounting structure or approach which is compatible with the resource, event and agent orientation of the REA model. See for example, Tingey at paragraphs 0009, 0059 and 0060. As such, Tingey makes general references to REA

models and some aspects of REA model structure. However, like Boozer, Tingey does not teach the step of "creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object," which is recited in independent claims 1 and 18. Nor does Tingey teach the similar limitation in independent system claim 34 of "a security model configured to implement an association class object for the REA defined association between the first object and the second object in the REA model, such that properties of the association class object define security between the first object and the second object." In fact, the Tingey publication does not show, discuss, or make any reference to association class objects for REA defined associations between a first object and a second object. Without teaching the association class object recited in the rejected claims, it is not possible for Tingey to teach that the association class object has properties defining security between the first and second objects, as is also specifically required in each of the rejected claims.

In paragraph 0066 of Tingey, which was cited by the Office Action as teaching association class objects and the definition of security using association class objects, no such teaching is actually provided. Paragraph 0066 of Tingey states that:

> Security and stability of data in the proposed architecture are factors in the selection of standardized event summary and detail records. Of course, a record-extensible structure, such as is described herein, is possible only through use of classification and hierarchy establishing tools and concepts along with relational models. Use of both kinds of models are critical to successful implementation of a functional security model. By definition, security itself is a hierarchical phenomenon, namely that rights are granted to individuals and organizations based on some form of classification. Thus, an approach based on hierarchic as well as relational structures is viable to the degree that such tree-based classification systems are available to secure and to organize the data. As an example of how such a record-extensible environment functions, three composite "Big E" events are outlined.

While Tingey does briefly mention the general concept of "security", this reference does not teach or suggest that security between a first object and a second object is defined in an association class object created for an REA defined association between the first and second object. Instead, Tingey

only state that security is based upon granting rights to individuals and organizations based some form of classification using tree-based classification systems.

As is well established, the Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, the Applicant is under no obligation to submit evidence of nonobviousness." See MPEP § 2142. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest ***all*** the claim limitations." (Emphasis added). See MPEP § 2142.

It has been shown that neither of Boozer or Tingey teach or suggest the limitation found in independent claims 1 and 18 of "creating an association class object for the REA defined association between the first object and the second object, the association class object having properties defining security between the first object and the second object." Using the same analysis, it has been shown that neither of Boozer or Tingey teach or suggest the claim limitation found in independent claim 34 of "a security model configured to implement an association class object for the REA defined association between the first object and the second object in the REA model, such that properties of the association class object define security between the first object and the second object." Since the combination of Boozer and Tingey do not teach or suggest all of the claim limitations, a *prima facie* case of obviousness has not been established for any of the independent or dependent claims, and the rejection of all pending claims should be withdrawn. Additionally, the dependent claims are believed to contain additional limitations which are neither taught or suggested by either of Boozer or Tingey. Consequently, it is respectfully submitted that independent claims 1, 18 and 34 are in allowable form, along with dependent claims 3-17, 20-33, and 36-39. It is therefore respectfully requested that the rejection of all pending claims be withdrawn.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: /John D. Veldhuis-Kroeze/

John D. Veldhuis-Kroeze, Reg. No. 38,354
900 Second Avenue South, Suite 1400
Minneapolis, Minnesota 55402-3244
Phone: (612) 334-3222
Fax: (612) 334-3312

JVK/jme